

Corgi MEGATILT

Corgi MEGATILT

USER GUIDE



Reviewed 12th October 2009

CONTENTS

Page	Subject
5)	Introduction
6)	Safety Notes
7)	Anti-tipping Frame
8)	Seat Functions
9)	Fault Warnings
10)	Circuit Breaker
11)	Control/Charging
12)	Disengaging the motors
13)	Removing the Seat
14)	Adjusting the seat and accessories
17)	Occupied Transport
18)	Key Points
19)	Care & Maintenance
20)	Technical Specification
21)	Service Record

Welcome to the CORGI MEGATILT User Guide

The Aim of the design

The purpose of the CORGI MEGATILT is to meet children's specific needs in a MEGATILTed chair. We have designed the seat position to be appropriate for the occupant. The overall stability has been achieved for children who have little sense of danger. The drive wheels have rubber tyres for grip, and are foam filled to remove the risk of punctures. The Tilt facility helps with loading into the chair using a hoist, and gives a good angle to secure the seating position before tilting forwards to driving position

We have been asked about kerb-climbers, but we do not feel that children should be driving MEGATILT chairs near roads. We meant them to be used in the garden, at country parks and in enclosed shopping centres. We are able to fit castor mounted kerb climbers, although they do increase the size of the MEGATILT chair. The risk of colliding with pedestrians should be carefully assessed, bearing in mind your child's ability to control the MEGATILT chair.

When you are planning to take the CORGI MEGATILT to a new venue, make sure that you are aware of steps, rivers, ponds, soft muddy ground and steep slopes. Don't let the occupant travel off alone. Always keep near to them to assist them.

The TILT facility must only be used on flat level surfaces. It is possible for the whole unit to tip over on uneven or sloping ground. Please make sure that the user understands this. Care must also be taken to ensure that other persons keep clear of the Tilt mechanism – especially when the seat is being lowered – to avoid entrapment of fingers etc

Activate, or your dealer, cannot accept liability for accidents arising from dangerous use of the CORGI Megatilt

You are now in possession of a piece of equipment that is potentially dangerous, but will broaden your horizons, and ease the frustration involved in limited mobility.

ENJOY YOURSELVES!

SAFETY NOTES

- Please read this User Guide fully before using your CORGI MEGATILT
- Check with your OT to make sure that they are happy with your child's function in the CORGI MEGATILT.
- Before using the CORGI MEGATILT it is essential to check that the adjustments are appropriate and the all handwheels are tightened.
- Each supervisor should be familiar with the operation of the CORGI MEGATILT. If there is any doubt they should read this User Guide.
- Make sure that the occupant has the appropriate harnesses fitted and adjusted before operating the CORGI MEGATILT.
- Before setting off, make sure that no loose clothes etc are likely to catch on the wheels or anything that is driven past.
- Do not try to go up or down kerbs in the CORGI MEGATILT.
- Do not drive through puddles or into water. The CORGI MEGATILT is battery powered, and water will cause a short circuit and damage the controller.
- If the CORGI MEGATILT is going to be used for occupied transport, please read this section carefully later in the Guide.
- When transporting the CORGI MEGATILT in a vehicle without an occupant, make sure that it is securely tied down to avoid movement in transit, or in an impact.
- Do not let children play with, hang onto, or crowd around the CORGI MEGATILT. Distractions can cause accidents.
- Make sure that children are clear of moving parts before making adjustments.
- Make sure that the power is switched off while loading and unloading from the chair.
- Make sure that you are aware of emergency procedures that apply to the venue you are at, and that you know where the emergency exits are located.
- Make sure that the speed is appropriate to the skill of the operator.
- Never leave the CORGI MEGATILT unattended.
- At all times when operating the CORGI MEGATILT, be aware of the danger of injury to yourself, the occupant, or any other person, especially going through doorways and crowded areas.
- Activate and your dealer cannot accept responsibility for any loss, damage or injury resulting from the incorrect operation of the CORGI MEGATILT.

OPERATING INSTRUCTIONS

At the rear of the chair there is an ***Anti-tipping frame*** with wheels.

The picture on the right shows the Anti-tipping wheels in the correct position for operation.



If greater stability is required, the whole frame can be moved backwards by loosening the two black levers, and re-positioning. You must always check that this frame is secure.

OPERATING INSTRUCTIONS

The Remote or Joystick controller.

In this picture you will see the ON/OFF switch in the centre of the controller near the battery indicator lights. The eight coloured lights indicate the level of charge left in the batteries. With all lights showing with full charge, and red lights being a low charge warning. The Horn is at the centre of the remote joystick denoted by the bugle symbol.



The Tilt Function button is located below the On/Off switch. To enter the Seat Function press this button. The number '1' on the left hand side will show when you are using this function.

The joystick is used to control the seat actuators.

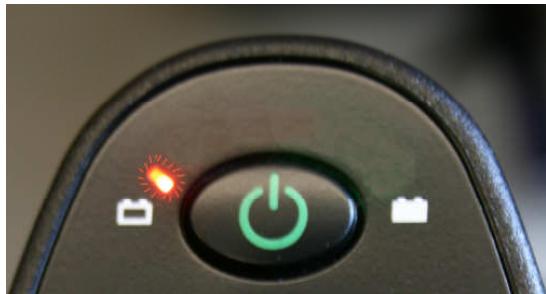
To tilt the seat back the joystick should be pulled backwards and then pushed forwards to tilt to the upright position.



FAULT WARNINGS

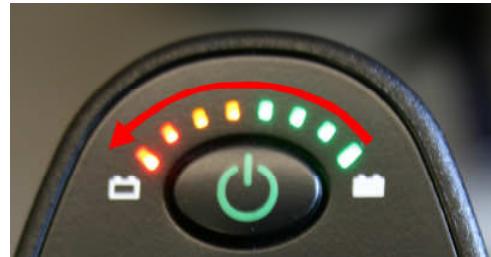
The following signals may appear and indicate the following:

Power is on – everything normal



Left red LED is flashing – this means very low battery charge – charge up as soon as possible, otherwise the charger will not be able to detect that it is connected up to a battery and will fail to start charging

The LED's are chasing from right to left – this means that the lock mode has been activated. To unlock the system press the horn twice within 10 seconds of switching on.



The LED's are chasing from left to right, alternating with a steady display.
This means that the system is being charged or is in programme mode.

All LED's flashing slowly – this means that the joystick has been touched while the system is powering up. Release the joystick to go back to neutral and the system will function normally.



CIRCUIT BREAKER

If you have no power at all, it is possible that there has been a power surge due to some physical resistance to the motors. This will have caused the circuit breaker to depress. To power up the system the circuit breaker should be pressed in again. This is found under the chair at the rear as shown



OPERATING INSTRUCTIONS

The SHARK D-type controller.

The speed of the CORGI MEGATILT is controlled pressing either the Tortoise or the Rabbit on the controller as seen in the picture. The ring of lights indicate the speed level set.

If you find that this is being adjusted to maximum speed when it would be unsafe, you may wish to have the controller programmed to reduce the speed.



Battery Charging.

You will have received a charger with the CORGI MEGATILT. The XLR plug fits into the front of the controller to charge the battery. Always charge the battery in a well ventilated area.

The charger comes with its own instructions. Please read these carefully before using.

It is good practice, if you use the Corgi Megatilt every day, to put it onto charge every evening. This helps to keep the batteries in good condition.

Battery Charger – Design may vary according to availability



OPERATING INSTRUCTIONS

Disengaging the Drive Motors.

There are times when you need to be able to push the CORGI MEGATILT along, without using the controller. For instance:

- Moving the CORGI MEGATILT into position in a minibus, ready to be strapped down for transportation.
- When the battery has run out of charge!
- When you are parking the CORGI MEGATILT while it is not in use.

It is important that you re-engage the Gearbox, as it is combined with the brake. We have found that secondary parking brakes are not suitable, as they are often left on when the MEGATILT chair drives away, resulting in damaged tyres.

If you want to stop, and the occupant will not co-operate, you should be able to remove the controller from its mounting and take charge of it yourself.

The Gearbox/Motors are disengaged by rotating the lever through 90 degrees as shown in the picture below.



Removing the Seat of the Corgi MEGATILT

The seat is removed by releasing the lever as shown



Or..on the latest model, the two release levers are pulled upwards together to release the front edge.



The Seat unit will then tilt backwards and can be lifted off the seat interface



The seat is replaced on the base, the front edge should be pushed down to ensure that the interface is locked into place

ADJUSTING THE SEATING

LATERAL SUPPORT RELEASE

When placing the child into the wheelchair it is advised to swing the lateral supports away to the sides of the chair. To do this the ball underneath the attaching block can be pushed up which will release the support to be swung away.

Ensure that the lateral support is clicked into place while the wheelchair is in use.



LATERAL SUPPORT ADJUSTMENT

To adjust the positioning of the lateral support there are two bolts on the back of the seat which can be loosened and the support will then slide up and down, to the preferred position, and moved in to support the trunk of the occupant. *Please ensure the bolts are fully tightened before using the wheelchair.*

ADJUSTING THE ARMREST

To adjust the height of the armrest there is a small hand wheel which can be unwound to release the grip. The armrest can then be pulled up or down and re-positioned and the screw then tightened.

When adjusting the armrest ensure the occupant's hands are kept away from the armrest, to prevent catching fingers when repositioning the armrest.



ADJUSTING THE HIP GUIDE

The hip guide can be adjusted for height by releasing the hand wheel as shown.

INCREASING WIDTH OF HIP GUIDE

To increase or decrease the seat width, the hip guides can be pulled outwards. This is achieved by using a hand wheel which grips the main attaching bar of the hip guide to the base of the seat. This handwheel is found underneath the seat. The hand wheel can be loosened and the hip guide will then slide out to the preferred position. The hip guides will slide out individually to fit the occupant. The hand wheel will then need to be tightened in the new position before use.

MOVING THE POMMEL

The pommel can be taken off the seat to assist with putting the child in the wheelchair. This can be done by loosening the screw fitting in the centre (on the underneath of the chair) at the front. When the screw is loosened, the pommel bar will slide out of the bar attached to the base, and the pommel will come off the chair. This can be replaced by sliding back into the holder and the screw tightened.

Ensure the pommel is firmly secured before setting off.



THE SINGLE FOOTREST

The angle of the footrest can be adjusted by using the lever handle on the bar underneath. When this lever handle is unwound, the footrest can be tipped back or forward to re-position it. When the preferred position is obtained the lever handle can be tightened. To re-position the handle, the centre button can be pushed in and the handle moved to a different position.

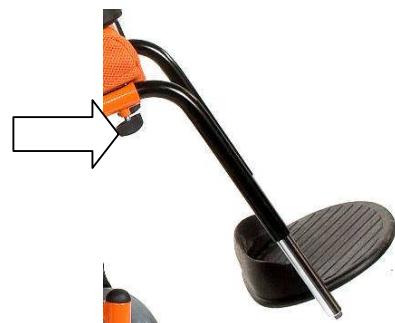
TO LOWER THE FOOTREST

If the footrest is too high or too low for the child this can be adjusted by loosening the bolt on the end of the bar which is attached inside the legrest tubes. Then the bar can be lowered or raised to suit the child. When re-positioned, the bolt should be tightened and the footrest is ready to use.



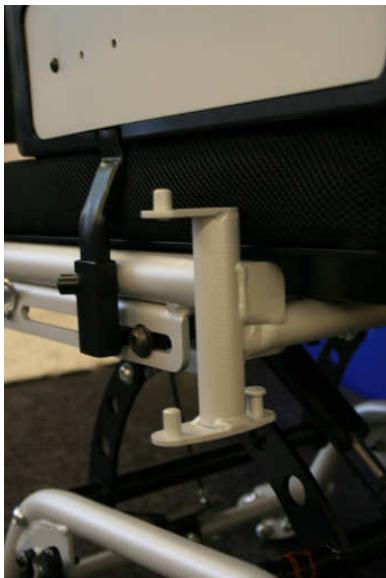
TO REPOSITION THE FOOTREST

There is also a facility to reposition the entire footrest away from, or in towards the wheelchair. This is achieved by using the screw fitting on the side of the chair at the very front, which holds the bar attaching the footrest to the base. When this screw is loosened the bar can be pulled or pushed to a new position, and then the screw should be tightened. The footplate can be removed when stowing the wheelchair into a vehicle.



INDIVIDUAL SWINGAWAY AND FLIP-UP FOOTPLATES

The individual swingaway footplates allow access for self loading. The footrest hangers are removable, or they can be rotated out of the way. The footplates themselves flip up, which may be sufficient for some situations.



ADJUSTING THE HEIGHT OF THE SWINGAWAY FOOTPLATES.

The footplates are bolted to the vertical tube, which is pre-drilled for height settings. The footplate bolt should be removed and the the footplates re-mounted in the desired position.

HEADREST HEIGHT ADJUSTMENT

The headrest can be lowered or raised by using the screw fitting silver block at the top of the chair back. When loosened the main be moved and the screw re-tightened.

Ensure the screw is fully tightened before the child uses the headrest.



on the bar can

TRAY TABLE ACCESSORY

The tray table is fitted into the armrest by a long pin to the underside of the tray, which is inserted into a the end of the armrest. This will then slide along so is secure around the child. There is a rubber rim the edge of the tray to prevent objects falling off.



attached hole in the tray around

Using the CORGI MEGATILT in occupied transport

The CORGI MEGATILT has been successfully crash tested in accordance with ISO7176 part 19. This means that it is suitable to be transported in a vehicle with the occupant sitting in it.

The CORGI MEGATILT is held down by four restraints: two at the front, and two at the back. These should be wheelchair restraints that have been designed for this purpose. The occupant is secured by a separate occupant restraint, which is anchored at shoulder level to the side of the vehicle.

Please study the next few pages carefully, to make sure that you are operating in a safe manner.

The Front Restraints are fitted first, passing around the crossbar at the front of the CORGI MEGATILT.



The Rear Restraints are fitted and tensioned to hold the CORGI MEGATILT securely as shown.



WHEELCHAIR RESTRAINTS

It is important that wheelchair restraints should be attached at an angle of no more than 45 degrees to the vehicle floor. Make sure that you obtain a copy of the operating instructions for the restraint system that you use.

OCCUPANT RESTRAINT



The occupant restraint is fitted over the occupant, working like a 3-point vehicle belt, with lap belt and diagonal belt.

It is important that this fits comfortably over any postural belts that are fitted to the seat.



KEY POINTS RELATING TO TRANSPORTATION

- 1) The Corgi MEGATILT must face forward in the vehicle, in the direction of travel.
- 2) The Corgi MEGATILT must be restrained with a 4-point wheelchair tie-down. No other restraint system must be used.
- 3) The occupant must be restrained with a 3-point passenger restraint, anchored at shoulder level.
- 4) The lap belt section of the passenger restraint should fit snugly over the pelvis of the occupant, at a steep angle of application to avoid abdominal intrusion.
- 5) Check with the vehicle converter, that the vehicle floor and sidewall structures have the appropriate strength required by the restraint manufacturers for the installation of the restraint systems.
- 6) Check that the vehicle converter has fitted the restraint system in conjunction with the restraint manufacturer. All of the restraint manufacturer's recommendations and guidance notes should be followed.
- 7) Check that all vehicle operators are suitably trained in the use, care and maintenance of the restraints.

Your Corgi MEGATILT has been designed and produced to a high standard. With correct use and maintenance it will give you years of trouble-free service.

Please read the following instructions:

- Regularly inspect the frame of the Corgi MEGATILT to ensure that all fixings are secure, and moving parts are in good working order.
- Wheels and tyres are subject to wear. If they need to be replaced, the work must be carried out by a qualified rehabilitation engineer.
- We recommend that the Corgi MEGATILT is checked once a year by a qualified rehabilitation engineer.
- Any damage or repairs should be assessed by a qualified rehabilitation engineer, or should be returned to your dealer.
- Only approved parts should be used when the Corgi MEGATILT is repaired.
- The Motor/Gearbox units are maintenance-free. No attempt must be made to remove the covers.
- Wheels and the frame may be sponged clean with warm water and a mild detergent. Water must be kept away from the battery box and the controller.
- After exposure to damp conditions, dry off the frame with a soft cloth, and leave in a warm, dry environment.
- Store the Corgi MEGATILT in a dry, safe place.

Technical Specifications

Controller	Dynamic Shark –Standard B-type
Options	Dynamic DX Range
Motor Type	24V DC
Park Brake	24V
MEGATILT Output	230 watt
Max Torque	55 Nm
No. Load Current	3.3A
Output Shaft Speed	120rpm
Gear Ratio	32 : 88 : 1
Max Speed	7km/h (4mph)
Drive Wheel	317.5mm pneumatic with Flexel fill
Batteries	2 x 12V Deep Cyclic in series
Rated Capacity	24Ah (Yuasa NPC24-12)
Charger	Exide 4Ah
Turning Circle	1130mm
Static Stability	10 degrees
Dynamic Stability	10 degrees

Stability figures are based on the Corgi MEGATILT chair with the seat in the normal lowered position. ***When the seat is raised the Corgi MEGATILT should not drive on any slope at all***

Service Record

ACTIVATE

INNOVATIVE PRODUCTS FOR CHILDREN

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